



## NUCLEAR REGULATORY COMMISSION

### 10 CFR Parts 51, 52, and 100

[NRC-2021-0091]

#### Regulatory Guide: Use of Plant Parameter Envelope in Early Site Permit

#### Applications for Nuclear Power Plants

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Final guide; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing a new Regulatory Guide (RG) 4.27, "Use of Plant Parameter Envelope in Early Site Permit Applications for Nuclear Power Plants." This RG provides guidance for nuclear power plant applicants that elect to use the plant parameter envelope concept to assume certain design parameters for an early site permit application when a specific reactor technology has not been selected for a proposed site.

**DATES:** Revision 0 of RG 4.27 is available on [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Please refer to Docket ID **NRC-2021-0091** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2021-0091**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: [Stacy.Schumann@nrc.gov](mailto:Stacy.Schumann@nrc.gov). For technical questions, contact the individuals listed in the "For Further Information Contact" section of this document.

- **NRC's Agencywide Documents Access and Management System**

**(ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the

search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov) or call 1-800-397-4209 or 301-415-4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

RG 4.27 and the regulatory analysis may be found in ADAMS under Accession Nos. ML23010A097 and ML21049A182, respectively.

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**FOR FURTHER INFORMATION CONTACT:** Edward O'Donnell, Office of Nuclear Regulatory Research, telephone: 301-415-3317; email: [Edward.ODonnell@nrc.gov](mailto:Edward.ODonnell@nrc.gov), and Allen Fetter, Office of Nuclear Reactor Regulation, telephone: 301-415-8556; email: [Allen.Fetter@nrc.gov](mailto:Allen.Fetter@nrc.gov). Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

## **SUPPLEMENTARY INFORMATION:**

### **I. Discussion**

The NRC is issuing a new guide in the NRC’s “Regulatory Guide” series. This series was developed to describe methods that are acceptable to the NRC staff for implementing specific parts of the agency’s regulations, to explain techniques that the staff uses in evaluating specific issues or postulated events, and to describe information that the staff needs in its review of applications for permits and licenses.

RG 4.27 was issued with a temporary identification of Draft Regulatory Guide, DG-4029 (ADAMS Accession No. ML21049A181).

## **II. Additional Information**

The NRC published a notice of the availability of DG-4029 in the *Federal Register* on June 24, 2021 (86 FR 33384) for a 45-day public comment period. The public comment period closed on August 9, 2021. Public comments on DG-4029 and the staff responses to the public comments are available under ADAMS under Accession No. ML23010A111.

As noted in the *Federal Register* on December 9, 2022 (87 FR 75671), this document is being published in the “Rules” section of the *Federal Register* to comply with publication requirements under 1 CFR chapter I.

## **III. Congressional Review Act**

This RG is not a rule as defined in the Congressional Review Act (5 U.S.C. §§ 801-808).

## **IV. Backfitting, Forward Fitting, and Issue Finality**

Issuance of RG 4.27 would not constitute backfitting as that term is defined in section 50.109 of title 10 of the *Code of Federal Regulations* (10 CFR), “Backfitting,” and as described in NRC Management Directive (MD) 8.4, “Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests”; constitute forward fitting as that term is defined and described in MD 8.4; or affect issue finality of any approval issued under 10 CFR part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.” As explained in RG 4.27, applicants and licensees are not required to comply with the positions set forth in RG 4.27.

## **V. Submitting Suggestions for Improvement of Regulatory Guides**

A member of the public may, at any time, submit suggestions to the NRC for improvement of existing RGs or for the development of new RGs. Suggestions can be submitted on the NRC’s public website at <https://www.nrc.gov/reading-rm/doc-collections/reg-guides/contactus.html>. Suggestions will be considered in future updates and enhancements to the “Regulatory Guide” series.

Dated: July 20, 2023.

For the Nuclear Regulatory Commission

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